

2



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/870,690	06/01/2001	Hiroshi Okada	32405W081	7691

7590 10/28/2003

Smith, Gambrell & Russell, LLP  
Beveridge, DeGrandi, Weilacher & Young  
Intellectual Property Group  
1850 M Street, N.W. (Suite 800),  
Washington, DC 20036

EXAMINER

TRAN, TAM D

ART UNIT	PAPER NUMBER
----------	--------------

2676

DATE MAILED: 10/28/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/870,690

Applicant(s)

OKADA ET AL.

Examiner

Tam D. Tran

Art Unit

2676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Usuki et al. (USPN 6239771 B1), hereinafter simply Usuki.

2. In regard to claim 1, Usuki teaches an image cut-away/display system comprising: a plurality of image taking means for taking images in continuous view areas; image combining means for combining the images taken by the image taking means to form a single wide-area view image; see col.19 line 65- col.20 line 5; view-point data generating means (operation panel) for generating view point data for each of users based on motion of eyeballs of each user; see col.22 lines 1-5; image cut-away means for cutting away images for each user from the single wide-area view image based on the view-point data for each user; and image displaying means for displaying the cut-away images for each user at a view point of each user. See col.20 lines 5-17.
3. In regard to claim 2, Usuki teaches An image cut-away/display system, wherein the image taking means include a plurality of cameras arranged around a reference center. See col.28 lines 14-20.

Art Unit: 2676

4. In regard to claim 3, Usuki teaches An image cut-away/display system, wherein the image displaying means includes a head-mount display by which the images from the image cut-away means and actual views are overlapped with each other. See col.1 lines 10-15.

5. In regard to claims 4, 6, 7, 9, Usuki teaches an image cut-away/display system, wherein the view-point generating means includes a head-motion tracker for tracking motion of a head of each user or an eyeball positional detector for tracking eye movement of each user. See col.22 lines 1-5.

6. In regard to claim 5, Usuki teaches an image cut-away/display system comprising: a plurality of cameras mounted on a vehicle for taking continuous pictures of a wide range of surroundings without a rift; see col.28 lines 14-20; a display apparatus mounted on a head of a crew member in said vehicle for display one of said continuous pictures; see col.1 lines 20-28; image combining means electronically and optically connected to said plurality of cameras for making a continuous image of said surroundings by combing said pictures; see col.20 lines 17-23; view-point information generating means included in said display apparatus for generating a view-point information of said crew member; see col.22 lines 1-5; image cut-away means electronically and optically interposed between said image combining means and said display apparatus for editing said continuous image so as to make an optimum use thereof for said crew member through said view-point information; see col.20 lines 5-17; and head mounted display means included in said display apparatus for displaying a cut-away image exclusively required for said crew member so as to clearly display said cut-away image with a high quality. See col.1 lines 20-28.

Art Unit: 2676

7. In regard to claim 8, Usuki teaches an image cut-away/display method, comprising the steps of: taking continuous pictures of a wide range of surroundings without a rift with a plurality of cameras mounted on a vehicle; see col.28 lines 14-20; rectifying a deformation of each picture by a correcting apparatus; see col.22 lines 5-15; preparing image combining means electronically and optically connected to said plurality of cameras; making a series of continuous images of said surroundings by combining said pictures; identifying said images required for displaying; extracting a common image related to each picture or a common color tone thereof from said picture; correcting a magnifying ratio of said image; see col.20 lines 17-23; generating a view-point information of a crew member by view-point information generating means included in said display apparatus; see col.22 lines 1-5; adjusting a position of said image; forming a connected image by connecting an overlapped portion of said image; and processing said image by a gradation method so as to smoothly and continuously connect said image without an outstanding overlapped portion thereof. See col.26 lines 55-66.

***Response to Arguments***

8. Applicant's arguments filed on 08/22/2003, have been fully considered but they are not persuasive.

Applicant argues that the prior art does not teach "view-point data generating means based on the motion of the eyeballs of each of the users". However, examiner respectfully disagrees with the argument because on col.22 lines 1-5, Usuki teaches operation panel (view-point data generating means) controls the movement of the display unit to correspond with the distance between the eyes of each player. For these reasons, the rejections are maintained.

Art Unit: 2676

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

***Conclusion***

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Tam D. Tran** whose telephone number is **703-305-4196**. The examiner can normally be reached on MON-FRI from 8:30 – 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Matthew Bella** can be reached on **703-308-6829**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered response should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth floor (Receptionist).

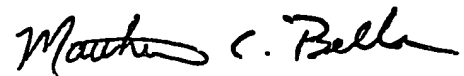
Art Unit: 2676

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Tam Tran

*TT*  
Examiner

Art unit 2676



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600